CLAIMS

1.   A method of retraining a trainable data classifier comprising the steps of:

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providing a first item of training data;

comparing the first item of training data with a second item of training data already used to train
10   the data classifier;

calculating a measure of conflict between the first and second items of training data;

15   using the first item of training data to retrain the data classifier responsive to the measure of conflict.

2.   A method according to claim 1 wherein the
20   step of using the first item of training data is responsive to a predetermined conflict threshold value.

3.   A method according to claim 2 wherein the
25   threshold value is non-zero.

4.   A method according to claim 1 wherein the measure of conflict comprises a geometric difference between the first and second items of training data.

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5.   A method according to claim 4 wherein the geometric difference comprises a Euclidean distance.

6.   A method according to claim 1 wherein the
35   measure of conflict comprises an association coefficient of the first and second items of training data.

7.   A method according to claim 6 wherein the association coefficient is a Jaccard's coefficient.

8.   A method according to claim 7 wherein the measure of conflict is derived from a both a Euclidean distance between and a Jaccard's coefficient of the first and second items of training data.

9.   A method according to claim 8 wherein the measure of conflict is derived from a Euclidean distance and a Jaccard's coefficient composed in an exponential relationship with respect to each other.

10.   A method according to claim 8 wherein the measure of conflict is derived from a function of a Euclidean distance multiplied by an exponent of a function of the Jaccard's coefficient.

11.   A method according to claim 1 wherein the data classifier comprises a neural network.

12.   A method according to claim 1 wherein the training data comprises telecommunications network data.

13.   A method according to claim 1 wherein the training data comprises telecommunications call detail record data.

14.   A method of training a trainable data classifier comprising the steps of:

        providing a plurality of items of training data;

        comparing a first of the items of training

data with a second of the items of training
data;

calculating a measure of conflict between
5   the first and second items of training data;

using one of the first and second items of
training data to retrain the data classifier
responsive to the measure of conflict.

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15.   A apparatus for retraining a trainable
data classifier and comprising:

an input port for receiving a first item of
15   training data;

a comparator arranged to compare the first
item of training data with a second item of
training data already used to train the data
20   classifier;

a calculator for calculating a measure of
conflict between the first and second items of
training data; and

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an output port arranged to output the first
item of training data to the data classifier
responsive to the measure of conflict.

30   16.   A anomaly detection system comprising
apparatus according to claim 15.

17.   A telecommunications data anomaly
detection system comprising apparatus according to
35   claim 15.

18.   A telecommunications fraud detection

system comprising apparatus according to claim 15.

19.   An account fraud detection system
comprising apparatus according to claim 15.

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20.   An apparatus for retraining a trainable
data classifier comprising:

an input port for receiving a plurality of
10   items of training data;

a comparator arranged to compare a first of
the items of training data with a second of the
items of training data;

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a calculator for calculating a measure of
conflict between the first and second items of
training data;

20   an output port arranged to output the first
item of training data to the data classifier
responsive to the measure of conflict.

21.   A program for a computer on a machine
25   readable medium arranged to perform the steps of:

receiving a first item of training data;

comparing the first item of training data
30   with a second item of training data already used
to train the data classifier;

calculating a measure of conflict between
the first and second items of training data;

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using the first item of training data to
retrain the data classifier responsive to the

measure of conflict.

22.   A program for a computer on a machine readable medium arranged to perform the steps of:

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receiving a plurality of items of training data;

comparing a first of the items of training data with a second of the items of training

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data;

calculating a measure of conflict between the first and second items of training data; and

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using one of the first and second items of training data to retrain the data classifier responsive to the measure of conflict.